

## Supplementary Appendix A: Semistructured Focus Group Guide and Semistructured Interview Guide

### 1. Semistructured interview guide

The interviews were conducted by trained research staff familiar with interview techniques. These questions merely serve as starting points of discussion. Interviewers adapted the guide according to the circumstances of each interview.

[Introduction, explain recording and confidentiality, intent of the project]

- Tell me about a time Diagnotes has worked really well (or one time it hasn't)
  - Why did you use it?
  - When and how?
  - How is it different?
  - What challenges and concerns?

(For nonusers, would replace with paging for the question)

This is a starting point for talking about what they think about Diagnotes or other methods and how often they use it or why. Probe as needed.

- How do you decide when to use the desktop (to send a text) and when to page a doctor via an operator, or using Diagnotes on your smartphone?
  - Talk me through the processes

(For nonusers, ask whether they've heard of Diagnotes and why they don't use)

- Tell me about your concerns (if any) about using a smartphone for work
- Who do you call on your phone?
- What are some things that the pager system does really well? (can also ask of Diagnotes)
- What are some things that the pager system needs to improve on? (can also ask of Diagnotes)
- Can you tell me about a time that Diagnotes has led to misunderstandings, delays, or miscommunication? What happened? Why do you think it happened?
- What do you think about the initiative to get rid of pagers?
  - What would you want to stay the same?
  - What are you happy to see change?
  - What are your concerns?
- What is something you wish physicians understood about your work (or the communication system)?
- Are there circumstances that you think would be better suited for Diagnotes (than the operator)? Please explain. And circumstances that it would be inappropriate to use Diagnotes? Please explain.
- Can you tell me about your expectations of physicians when you contact them?

(e.g., response time, attitude, etc.)

- Physician expectations of you

### 2. Semistructured focus group guide

**Overview:** The purpose of today's discussion is for us to understand your experiences with Diagnotes, the ways that it has impacted communications as well as the challenges that have arisen. We are interested in all perspectives.

**Format:** For the purpose of this discussion, there is no right answer, wrong answer, or seniority in the group. You may comment on what anyone says. This is meant to be a group conversation. We should be finished in 50 minutes. Because of our limited time constraint, I may pivot the conversation at times to keep us on track.

**Confidential:** Your individual responses are strictly confidential. I ask everyone to keep individual responses in confidence.

**Recording:** The discussion will be recorded, so that we can review comments that might be missed while we are talking. Is that OK with everyone? [Those who will not agree will not be able to participate.] Because we're recording, please speak loudly, so that the recorders will pick up your voice.

**Record:** [Conspicuously turn on both recorders.]

**Warm up:** Although some of you may know each other, I would like to start by asking you to introduce yourself, along with your role.

Main questions:

- To begin, like to know how much you are using Diagnotes,
- What do you use it for?
  - With whom, who is sending, who is receiving
  - What the messages are about?
- Describe your experience using this so far
  - Workload
  - Rationale (when to use Diagnotes)
- Tell me how has Diagnotes improved how you work or communicate?
- Tell me about a time when you have experienced near misses or miscommunications with Diagnotes?
- What are some things Diagnotes could be doing better? Some features you wish Diagnotes had?
- Best practices you've developed
- How did you learn about Diagnotes?

**Wrap up:** Summarize experiences, thank you